Minutes of the 23rd FOM meeting held on 05.07.2011

Agenda:

1) Follow-up of the last meeting (B. Mikulec)
2) Status of the machines (Supervisors)
3) Schedule (B. Mikulec)
4) AOB
5) Next agenda

1 Follow-up of the last meeting

The minutes of the 22nd FOM meeting were approved.

Follow-up from the last FOM:

Pending actions:

Problems with POPS (3 actions)

Studies will be resumed when POPS is back. Actions not closed.

Analyze the frequent trips of PSB cavities and steerers

They are working on the issue during the meeting. After the meeting, A. Newborough and D. Gros informed that the reason for the water flow problems was found to be a pinched flexible cable leading to a pressure increase in the PSB circuits. The flexible was replaced and successfully tested during the technical stop. The action will be closed at the next FOM.

S. Gilardoni mentioned an old action on magnetic fluctuations at injection from 2010, for which a new hardware was installed by the magnet group. It was understood that the fluctuations are caused by hysteresis from the previous cycle. A presentation has been given at the IEFC last week. The problem seems to be understood, but the proposed steps to be taken will spread over the next 2 years.

2 Status of the machines

LINAC2 (M.O'Neill):

Another quadrupole in tank 1 needed a reset. Auxiliary supplies are being replaced during the technical stop to hopefully reduce the number of these tank 1 quadrupole trips.

An electronic module inside the source was exchanged yesterday morning.

There have been ongoing problems with the source. A high flashover rate was observed at the beginning of the week and it came back to the normal rate by Thursday and Friday. A cleaning of the HT column will be carried out during the technical stop. Besides, source dips have reappeared. These are intensity drops by ~3% for around 5 min, which repeat every 10 min or 90 min. The same problem last year was due to a water leak, but the presumed location is not very accessible. Investigations are ongoing to see if one can detect a leak. On average one dip per hour is observed.

RP is currently in the machine and interventions are going on.

LINAC3:

D. Küchler started the source and tests are ongoing. These tests will continue after the technical stop.

PSB (B. Mikulec for G. Rumolo):

On Wednesday afternoon the specialist had to change a Thyratron on BI1.DISP.

Extraction septum trips continued. The reason was a noisy current measurements on the Pearson current transformer. Measuring instead on the primary circuit and scaling accordingly solved the problem. The transformer will be exchanged during the technical stop.

Yesterday beam from ring 2 suffered from some jitter of ~40 ns in the synchronization process. The specialist intervened, but could not yet find the reason of the problem.

K. Kostro said that on Tuesday around 10am a BI frontend was replaced (BPMBE).

ISOLDE (E. Siesling):

On GPS the robot has been repaired. Collective dose was 150 microSv and lower than expected due to the long cool-down time. On GPS a used HRS target is currently installed.

On HRS, the setting up for the MINIBALL experiment was quite difficult, but the users are happy.

On Monday morning a target switch was performed for yield tests.

The run over the weekend was very good. On HRS there is a brand-new target on.

ISOLDE users (M. Kowalska):

The users are happy and thankful for squeezing the experiments in.

ISOLDE is now preparing for 2 parallel runs.

PS (R. Steerenberg):

It was a good week for the PS with only small problems.

Many resets had to be done for the 40 MHz RF cavities. The power supply is broken and difficult to repair.

During the technical stop, special attention will be paid to the 10 MHz cavities, especially C51.

Trips of the magnetic septum 57 for the extraction to the East Area occurred due to over-temperature. The temperature protection system was taken offline for repair, and the septum is now protected only by the rms current limit on the power converters.

An access was performed in the shadow of the 18kV repair to measure the length of the connecting pipe for the magnet that is planned to be replaced during the technical stop.

As already mentioned last week, a broken pulse repeater caused 1.5h stop for SFTPRO, CNGS and AD beams. The start timing was lacking and it was difficult to diagnose. The spare situation is not very clear. S. Hancock said that a TSM application would have diagnosed the problem, but R. Steerenberg and S. Gilardoni answered it is still not easy to find out which device was broken.

Around 9:30 the same day a problem on the ZT11.BHZ02 occurred and the first line service was called. The power converter became available again around 10:15.

Beam availability on Monday and also partly on Tuesday was hampered by an intermittent problem with the PS Booster extraction septum power converter. A temporary solution was put in place.

In the afternoon a problem on the power converter of the quadrupole magnet, F61.QFO03, in the East Area beam line suffered from a broken 5V power supply that was replaced. This nevertheless stopped all beam to the East Area for about 45 minutes.

On Saturday, CNGS and SFTPRO were perturbed until an element for the slow extraction was replaced.

S. Gilardoni said that on MTE they are continuing the tests and have doubts on the tune measurements, which is being followed up with the BI experts.

East Area (L. Gatignon):

No real beam problems.

CLOUD ran out of oxygen and lost one day of operation.

A magnet is being replaced in the F61 transfer line, but some drawings are lacking.

East Area Users and TOF

No additional news (H. Breuker excused).

AD (C. Oliveira):

It was a dedicated week for ACE. Setting up occurred on Monday and had to wait for the signature of the beam permit.

On Wednesday there was a problem with a dipole in the injection line. The repair of the power supply and the steering took 4h.

Intensity was reduced by 50% following a request of users.

Nominal beam was not yet established.

AD Users:

No report.

SPS (K. Cornelis):

The 18kV cable was repaired on Thursday and took a couple of hours.

On Friday evening a vacuum leak was found in TT20 in the zone between the splitters (just behind the place where it happened a few weeks ago). The vacuum group had anticipated the failure and had already started the production of the spare. It should be finished by tomorrow or Thursday, and the intervention will take place on Thursday. An ALARA committee should meet beforehand.

A new feature of the North Area access system is quite annoying: when a local zone is redefined, a reboot of the whole NA access system occurs, which means no beam for North Area (interlocked) and also a need to repatrol the zones. L. Gatignon will contact the expert.

Beams for the LHC MD ran pretty well. Record intensity per bunch and brightness were achieved.

North Area (L. Gatignon)

As already mentioned by K. Cornelis last week, it was very hot earlier last week, and the COMPASS spectrometer overheated. The valve issue is now fixed.

Collimators were misaligned on H8, which took some time to diagnose. Users lost almost all beam.

North Area users

No report.

CNGS (E. Gschwendtner)

CNGS is running pretty well, but the production rate was poor during the LHC MD.

CTF3 (P. Skowronski):

There is no major technical problem to report. CTF3 is running the accelerating system and started night operation, supervised by the PS operation crew.
Yesterday there was access for CLEX. CTF3 will be running during the technical stop.

TI (P. Sollander):

Nothing to report.

LHC interface with injectors (M. Lamont):

The LHC MD program could be done with impressively bright beams. There is a good potential for high luminosity. There is a technical stop this week and a restart with double batch 50 ns beams (1.2e11 and 2.5 mm.mrad). The LHC50 single batch should be shelved.

3 Schedule / Supercycle / MD planning

The 2011 schedule (V3.1) is available at:
https://espace.cern.ch/be-dep/BEDepartmentalDocuments/BE/injector_schedule.pdf

All planned interventions for the injector complex are available via the on-line agenda:

https://espace.cern.ch/be-dep/FOM/Lists/Agenda/calendar.aspx

In the new planning, a floating MD was moved from week 29 to 30 and the organization of week 35 was changed.

D. Manglunki pointed out that ions will be put in the SPS in week 44 to prepare the fixed target cycle for NA61, which is 19.2s long and may lead to long supercycles.

4 AOB

B. Mikulec reported that for the technical stop, machine superintendents complained that too many interventions are coming in the last minute, which is first of all time-consuming for everybody including also RP, but it could also be problematic in case the intervention would affect the beam stop time. Information transfer by the FOM representatives of certain groups should be improved.

F. Tarita mentioned that there was an intervention by EDF going on during this meeting.

5 Next meeting

The next meeting will be held on Tuesday, 12th July at 10:00 in 874-1-011.

Preliminary Agenda:

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Minutes edited by B. Salvant